

## **DETAILED ACTION**

### ***Status of claims***

1. This communication is responsive to the amendment filed on 11/06/2009, where Applicant amended claims 1, 18 and 20 and in earlier communication cancelled claim 7, resulting in 1-6 and 8-20 being the currently pending claims.

### ***Response to Arguments***

2. Applicant's arguments with respect to claim 1-6 and 8-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-6, 8-11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication Number 2001/0021998 (Margulis) in view of U.S. Patent Number 6,993,363 (Hsu) and further in view of U.S. Patent Number 6,930,661 (Uchida et al.) and further in view of Calderon et al (WO 2004/045092).

4. Regarding claims 1, 15 and 18-20, Margulis teaches a wireless terminal comprising: communication means for exchanging, with a base device **[Figure 3, # 310,**

**page 4, paragraph 0045]** either (i) video data and/or audio data [**Figure 8, # 812, video, audio and data**], or (ii) a control command containing transmission channel switching information [**Page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source**]; And Hsu teaches a communication condition detection means for detecting a communication condition; and indication means for indicating at least a transmission condition of the control command, according to the communication condition detected by the communication condition detection means [**Abstract**]. But neither Margulis nor Hsu teach that the wireless terminal switches the transmission channels either (i) every cycle corresponding to not less than a period during which the base device selects all the transmission channels, or (ii) every cycle corresponding to a period during which the base device selects all the transmission channels and which corresponds to time in which the wireless terminal maintains one of the transmission channels. Uchida teaches a bi-directional communication system, display apparatus, base apparatus and bi-directional method [**Title**], whereby the base apparatus has an antenna and a tuner for receiving and selecting analog television broadcast signals [**Column 4, lines 42-43**], while at other times when the set-top box [**Figure 1, # 300**] is on, it receives digital satellite broadcast signals and outputs a video signal and an audio signal of a selected channel [**Columns 12 & 13, lines 66-67 and line 1**], and that a tuner [**Figure 4, # 302**] selects and demodulates one of the satellite broadcast signals in accordance with a channel selection control signal sent by the control section, and supplies the demodulated broadcast signal to the descramble section. The channel selection control signal is

formed by the control section in accordance with a remote control signal from the user of the display apparatus. In addition, Uchida teaches that components of the base apparatus is controlled by control section **[Figure 3, # 230]** which may be microcomputer composed of a CPU, a ROM, a RAM and an EEPROM connected to one another by a CPU bus. The ROM stores various processing programs to be executed by the base apparatus and data necessary for such processing. The RAM is used principally as a working area for various processes for temporarily storing data and other necessary information. But Margulis in view of Hsu in view of Uchida do not specifically show that the transmission channels comprising a number of communication channels for communication between the base device and the wireless terminal. In related art, Calderon et al. shows that the transmission channels comprising a number of communication channels for communication between the base device and the wireless terminal **[Page 6, lines 1-14; page 9, lines 5-21; page 10, lines 1-15]; [in here, preventing interference is performed, by delaying transmission of one of the system; there are no transmissions on either 802.11 or Bluetooth]**. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Calderon et al into the teaching of Margulis, Hsu and Uchida in order to avoid concurrent radio transmission by both wireless systems **[see Calderon et al; page 6, lines 1-10]**.

5. Regarding claim 4, Hsu further teaches a wireless terminal, wherein the communication condition detection means detects the communication condition with the base device, with which a communications link is established **[Column 12, lines 19-24]**.

Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to inform the user of any communication link interruption.

6. Regarding claim 5, Hsu further teaches a wireless terminal, wherein the indication means indicates at least any one of reception sensitivity information items indicating that the video data and/or the audio data are interrupted, that transmission channels are being switched, that connection is being made, and that the wireless terminal is out of communication range **[column 12, lines 25-30]**. Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to provide the user with perceptible alerts.

7. Regarding claim 6, Margulis further teaches a wireless terminal, wherein the indication means either displays a message by using display means or carries out message sound production by using audio output means **[Page 2, paragraph 0020]**.

8. Regarding claim 8, Margulis further teaches a wireless terminal, wherein the communication means transmits either (i) the video data and/or the audio data, or (ii) the control command, in accordance with a spread spectrum wireless method **[page 4, paragraph 0055]**.

9. Regarding claim 9, Margulis further teaches a wireless terminal, wherein the communication means performs low-power short-distance two-way wireless communication in conformity to wireless LAN, or Bluetooth, and Ultra Wide Band **[Page 6, paragraph 0069; i.e. the network processing procedure may depend on various factors such as the particular wireless transmission techniques utilized for**

**effective wireless transmission or the type of bus arbitration required for WAN or LAN interfaces].**

10. Regarding claim 10, Margulis further teaches that the communication means transmits the video data and/or audio data in a form of MPEG stream encoded in conformity with an MPEG-2 encoding method **[Page 5, paragraphs 0058 and 0060, respectively].**

11. Regarding claim 11, Margulis further teaches a wireless terminal, comprising: a display device for displaying a video signal according to the video data that the display device receives **[Figure 3, # 314].**

12. Regarding claim 13, Margulis further teaches a base device **(Figure 1, # 156)** for exchanging, with the wireless terminal **[Page 3, paragraph 0040; i.e. the wireless base station may be implemented as a set-top box which communicates with a wireless remote]**, either (i) video data and/or audio data **[Figure 8, # 812, video, audio and data]**, or (ii) a control command containing transmission channel switching information **[Page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source].**

13. Regarding claim 14, Hsu further teaches a base device, comprising: communication condition detection means for detecting a communication condition the base device transmitting, to the wireless terminal, information indicative of the communication condition detected by the communication condition detection means **[Abstract]**. Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to notify the user of any lack of communication.

14. Regarding claim 16, Margulis further teaches a base device, wherein the video data and/or the audio data is received via a broadcast receiving tuner **[Page 6, paragraph 0067]**.

15. Regarding claim 17, Margulis further teaches a wireless system, comprising: the wireless terminal; and a base device **[Figure 3, #310 and Figure 5, # 156]**for exchanging, with the wireless terminal **[Page 4, paragraph 0045]**, either (i) video data and/or audio data **[Figure 8, # 812, video, audio and data]**, or (ii) a control command containing transmission channel switching information **[Page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source]**.

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis, Hsu, Uchida and Calderon as applied to claim 1 above in view of U.S. Patent Number 7,210,158 (Forler).

17. Regarding claim 2, Margulis, Hsu, Uchida and Calderon has been discussed above. What Margulis, Hsu, Uchida and Calderon fail to teach is that the wireless terminal further comprising: transmission channel maintaining means for (i) measuring time from which communication is interrupted, and (ii) maintaining a transmission channel until a predetermined period of time has elapsed since interruption of the communication. Forler teaches a viewer blocking system whereby, if the television system fails to detect a new program related information within a predetermined period of time as determined by the incrementing of the V-chip Packet Timer, the television system will allow user access to the channel, or maintain the channel unblocked

**[Column 6, lines 21-25]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the channel maintaining means of Forler into the combined system of Margulis, Hsu, Uchida and Calderon in order to avoid a complete loss of transmission.

18. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis, Hsu, Uchida and Calderon as applied to claim 1 above in view of U.S. Patent Number 7,167,679 (Sano).

19. Regarding claim 3, Margulis, Hsu, Uchida and Calderon has been discussed above as applied to claim 1. What Margulis, Hsu, Uchida and Calderon fail to teach is that the wireless terminal detects the communication condition according to at least one of (i) an electric field intensity of a received radio wave, (ii) an error rate, and (iii) a number of times of retransmission request made based on the error rate. Sano teaches a display terminal and method for a radio LAN system for receiving image data from an apparatus by radio communication wherein, a reception quality level is displayed when the reception electric field intensity at the display terminal is sufficiently high, or when the bit error rate exhibits a high bit error rate **[Column 9, lines 59-64]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the signal reception quality of Sano into the combined system of Margulis, Hsu, Uchida and Calderon in order to assess the optimum positioning of the wireless terminal with respect to the base station for good quality reception of the base station transmitted signals.

20. Regarding claim 12, Margulis, Hsu, Uchida and Calderon has been discussed above as applied to claim 1, but what Margulis, Hsu, Uchida and Calderon fail to specifically teach is that the wireless terminal includes communication condition detection means for determining whether or not an image displayed by the display device is distorted. Sano teaches a display terminal for a radio LAN system which is configured for receiving image data from a transmitting apparatus by radio communication and displaying an image based on the received image data on a display section. The display terminal comprises a reception quality supervision section, and a reception quality display control section displays a reception quality level of the display terminal on a display section of the display terminal indicative of an output of the reception quality supervision section **[Column 2, lines 43-55]**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the signal reception quality of Sano into the combined system of Margulis, Hsu, Uchida and Calderon in order to ascertain the received image quality.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAK R. JAMA whose telephone number is (571)270-5887. The examiner can normally be reached on Monday-Thursday; 4-10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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